

# Atlantic Richfield Company

**Anthony R. Brown**  
Project Manager, Mining

4 Centerpointe Drive  
La Palma, CA 90623-1066  
Office: (714) 228-6770  
Fax: (714) 228-6749  
E-mail: Anthony.Brown@bp.com

March 20, 2012

**VIA EMAIL**

Ms. Kara Hellige, Senior Project Manager  
United States Army Corps of Engineers  
1970 East 3rd Street, Suite 109  
Durango, Colorado 81301

**RE: Notification of Flood Dike Upgrades at Rico-Argentine Site, Rico Tunnels Operable Unit OU01, Unilateral Administrative Order for a Time-Critical Removal Action, United States Environmental Protection Agency Region 8**

Dear Ms. Hellige:

Atlantic Richfield Company is hereby submitting this Letter of Notification ("Notification") to the United States Army Corps of Engineers (USACE), Sacramento District, Durango Regulatory Office, of a Unilateral Administrative Order ("UAO") and subsequent UAO Amendment to Order (dated March 28, 2011) for a Time-Critical Removal Action ("Order") to Atlantic Richfield Company (Docket Number: CERCLA-08-2011-0005, dated March 23, 2011) pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9606(a) ("CERCLA"), Executive Order 12580 (dated January 23, 1987), and Environmental Protection Agency ("EPA") Delegation numbers 14-14-A and 14-14-B.

This Order pertains to property located at the Rico Tunnels Operable Unit (OU01) of the Rico-Argentine Mine Site (CERCLIS ID number COD9890952519) near Rico, Dolores County, Colorado approximately 25 miles southwest of the town of Telluride and just north of the Town of Rico. This Order requires Atlantic Richfield Company to conduct removal actions described to abate an imminent and substantial endangerment to public health or welfare, or environment by a potential release of hazardous substances at or from the Site. In support of this Notification the following documents are provided:

**Attachment A.** Nationwide Permit Pre-Construction Notification Form (Informational only, pp 1- 5)

**Attachment B.** Regional and Location Map

**Attachment C.** Plan Drawings

**Attachment D.** U.S. EPA Unilateral Administrative Order for Removal Action Letter (dated March 23, 2011)

**Attachment E.** U.S. EPA UAO Amendment to Order (dated March 28, 2011)

**Attachment F.** U.S. EPA Memo, New Effective Date for Rico UAO CERCLA 08-2011-0005 (dated April 21, 2011)



Anthony R. Brown  
March 1, 2012  
Page 2

A complete copy of the Removal Action Work Plan accompanying the Order has not been included as part of this Notification. However, upon request, this document will be provided.

If you have any questions or comments, please feel free to contact me at (714) 228-6770 or via email at Anthony.Brown@bp.com.

Sincerely,



Tony Brown  
Project Manager  
Atlantic Richfield Company

Enclosures

cc: S. Way, EPA  
J. Christner, URS  
T. Moore, AR  
A. Cohen, DGS  
S. Reise, ENSci  
T. Kreutz, AECOM  
D. Yadon, AECOM  
E. Gleason, AECOM



Ms. Kara Hellige  
March 1, 2012  
Page 2 of 2

## **Attachment A**

Nationwide Permit Pre-Construction Notification Form

# U.S. Army Corps of Engineers

## South Pacific Division



### Nationwide Permit Pre-Construction Notification (PCN) Form

This form integrates requirements of the Nationwide Permit Program within SPD, including General and Regional Conditions. Please consult instructions prior to completing this form.

Box 1 Project Name Rico Argentine Mine UAO		Applicant Name Mr. Anthony Brown	
Applicant Title Project Manager, Mining		Applicant Company, Agency, etc. Atlantic Richfield Company	
Mailing Address 4 Centerpointe Drive, La Palma, CA 90623-1066		Applicant's internal tracking number (if any) CERCLA - 08 - 2011 - 0005	
Work Phone with area code	Home Phone with area code	Fax #	E-mail Address
Relationship of applicant to property: <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Purchaser <input type="checkbox"/> Lessee <input type="checkbox"/> Other: X			
Application is hereby made for verification that subject regulated activities associated with subject project qualify for authorization under a Corps nationwide permit or permits as described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agency to which this application is made, the right to enter the above-described location to inspect the proposed, in-progress or completed work. I agree to start work <u>only</u> after all necessary permits have been received.			
Signature of applicant			Date (m/d/yyyy)

Box 2 Authorized Agent/Operator Name and Signature <i>(If an agent is acting for the applicant during the permit process)</i> Ronald E. Spears, C.E.			
Agent/Operator Title Senior Restoration Biologist		Agent/Operator Company, Agency, etc. AECOM Technology Corporation	
Mailing Address 717 17th Street, Suite 2600, Denver, Colorado 80202			
E-mail Address ronald.spears@aecom.com			
Work Phone with area code 303.308.3585	Home Phone with area code	Fax # 303.228.3001	Cell Phone # 720.644.7046
I hereby authorize the above named authorized agent to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. I understand that I am bound by the actions of my agent and I understand that if a federal or state permit is issued, I, or my agent, must sign the permit.			
Signature of applicant			Date (m/d/yyyy)
I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate.			
Signature of authorized agent			Date (m/d/yyyy)

Box 3 Name of property owner(s), if other than applicant:	
Owner Title	Owner Company, Agency, etc.
Mailing Address	
Work Phone	Home Phone

Box 4 Name of contractor(s) (if known):	
Contractor Title	Contractor Company, Agency, etc.
Mailing Address	
Work Phone	Home Phone

Include multiple copies of Box 5 for separate sites.

Box 5 Site Number <b>1 of 1</b> . Project location(s), including street address, city, county, state, zip code where proposed activity will occur: Site is located approximately 0.75 mile north of the Town of Rico in Dolores County, Colorado (see Figure 1)	
Waterbody (if known, otherwise enter "an unnamed tributary to"): <b>Dolores River</b>	
Tributary to what known, downstream waterbody:	
Latitude & longitude (D/M/S, DD, or UTM): <b>37.701111 Lat and -108.008056 Long</b>	Zoning Designation (no codes or abbreviations): <b>Unknown</b>
Assessors parcel number: <b>Unknown</b>	Section, Township, Range: <b>SW 1/4 of Section 24 and NW 1/4 of Section 25</b>
USGS Quad map name: <b>Rico</b>	
Watershed and other location descriptions, if known: <b>Upper Dolores River</b>	
Directions to the project location: The site is accessed via approximately 0.75 mile of an existing gravel from Colorado State Highway 145 as shown on Figure 2. Highway 145 provides access from Telluride (27 road miles) and Montrose (86 road miles via US Highway 550 and then State Highway 62) to the north and from Co1tez (50 road miles), and Durango (92 road miles via US Highway 160 and State Highway 184) to the south.	

**Nature of Activity** (Description of project, include all features, see instructions):

Embankment armoring along the east side (left-bank) of the Dolores River as part of a CERCLA Removal Action, pond stability. Armoring will consist of Type A fill placed along crest of dyke with an approximate 12 foot Finished Crest Width with a 2:1 Slope. Existing slope will be regraded, lined with a 6-inch Type 1 filter and stabilized with 2 foot Class III (12"D50) Rip-rap placed at approximately the 100-year flood elevation.

**Project Purpose** (Description the reason or purpose of the project, see instructions):

The project purpose is to comply with a Unilateral Administrative Order ("UAO") and subsequent UAO Amendment to Order (dated March 28, 2011) for a Time-Critical Removal Action ("Order") to Atlantic Richfield Company (Docket Number: CERCLA-08-2011-0005, dated March 23, 2011) pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9606(a) ("CERCLA").

Use Box 6 if dredged and/or fill material is to be discharged:

**Box 6 Reason(s) for Discharge into waters of the United States:**  
CERCLA Removal Action

**Type(s) of material being discharged and the amount of each type in cubic yards:**

Type A fill Material and 2' Class III Rip-Rap (12" D50). Approximately 400 CY

**Total surface area in acres of wetlands or other waters of the U.S. filled** (see instructions):

N/A. Proposed Action will be conducted above OHW elevation

Indicate in ACRES and LINEAR FEET (where appropriate) the proposed impacts to waters of the United States, and identify the impact(s) as permanent and/or temporary for each water body type listed below:

Water Body Type	Permanent		Temporary	
	Acres	Linear feet	Acres	Linear feet
Wetland				
Riparian streambed				
Unveg. streambed	0.70	805		
Lake				
Ocean				
Other				
Total:				

Potential indirect and/or cumulative impacts of proposed discharge (if any):  
Potential indirect and inadvertent impacts may include incidental discharge of fill material below the ordinary high-water mark (OHW) during construction. In order to reduce the potential for an inadvertent discharge Best Management Practices will be implemented and maintained during Removal Action construction.

Required drawings (see instructions):

Vicinity map: ☒ Attached (or mail copy separately if applying electronically)

To-scale Plan view drawing(s): ☒ Attached (or mail copy separately if applying electronically)

To-scale elevation and/or Cross Section drawing(s): ☒ Attached (or mail copy separately if applying electronically)

Has a wetlands/waters of the U.S. delineation been completed?

☐ Yes, Attached (or mail copy separately if applying electronically) ☒ No

If a delineation has been completed, has it been verified in writing by the Corps?

☐ Yes, Date of approved jurisdictional determination (m/d/yyyy): Corps file number: ☒ No

Please attach<sup>1</sup> one or more color photographs of the existing conditions (aerials if possible).

<sup>1</sup>or mail copy separately if applying electronically

Dredge Volume: Indicate in CUBIC YARDS the quantity of material to be dredged or used as fill: No dredging will occur.

Indicate type(s) of material proposed to be discharged in waters of the United States:  
No material will be discharged into waters of the U.S.

For proposed discharges of dredged material into waters of the U.S. (including beach nourishment), please attach<sup>2</sup> a proposed Sampling and Analysis Plan (SAP) prepared according to Inland Testing Manual (ITM) guidelines (including Tier I information, if available).

<sup>2</sup>or mail copy separately if applying electronically

Is any portion of the work already complete? ☐ YES ☒ NO

If yes, describe the work:

Box 7 Intended NWP permit number<sup>3</sup>: 0

Intended NWP permit number (2<sup>nd</sup>):

Intended NWP number (3<sup>rd</sup>):

<sup>3</sup>Enter the intended permit type(s). See NWP regulations for permit types and qualification information ([http://www.usace.army.mil/inet/functions/cw/cecwo/reg/nationwide\\_permits.htm](http://www.usace.army.mil/inet/functions/cw/cecwo/reg/nationwide_permits.htm)).

Box 8 Authority:

Is Section 10 of the Rivers and Harbors Act applicable?: ☐ YES ☒ NO

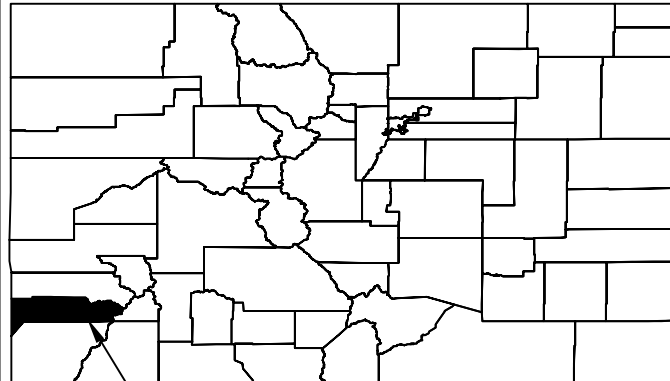
Is Section 404 of the Clean Water Act applicable?: ☐ YES ☒ NO





Ms. Kara Hellige  
March 1, 2012  
Page 2 of 2

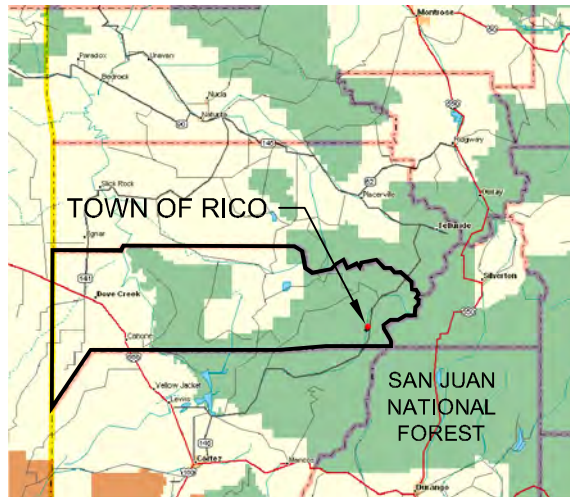
**Attachment B**  
Project Location Map



DOLORES COUNTY

STATE OF COLORADO

NOT TO SCALE



TOWN OF RICO

SAN JUAN  
NATIONAL  
FOREST

DOLORES COUNTY

NOT TO SCALE



HIGHWAY 145

ST. LOUIS  
TUNNEL / ADIT

ST. LOUIS PONDS

DOLORES RIVER

TOWN OF RICO

VICINITY MAP

Scale: 1"=1000'



# RICO-ARGENTINE SITE - OU01

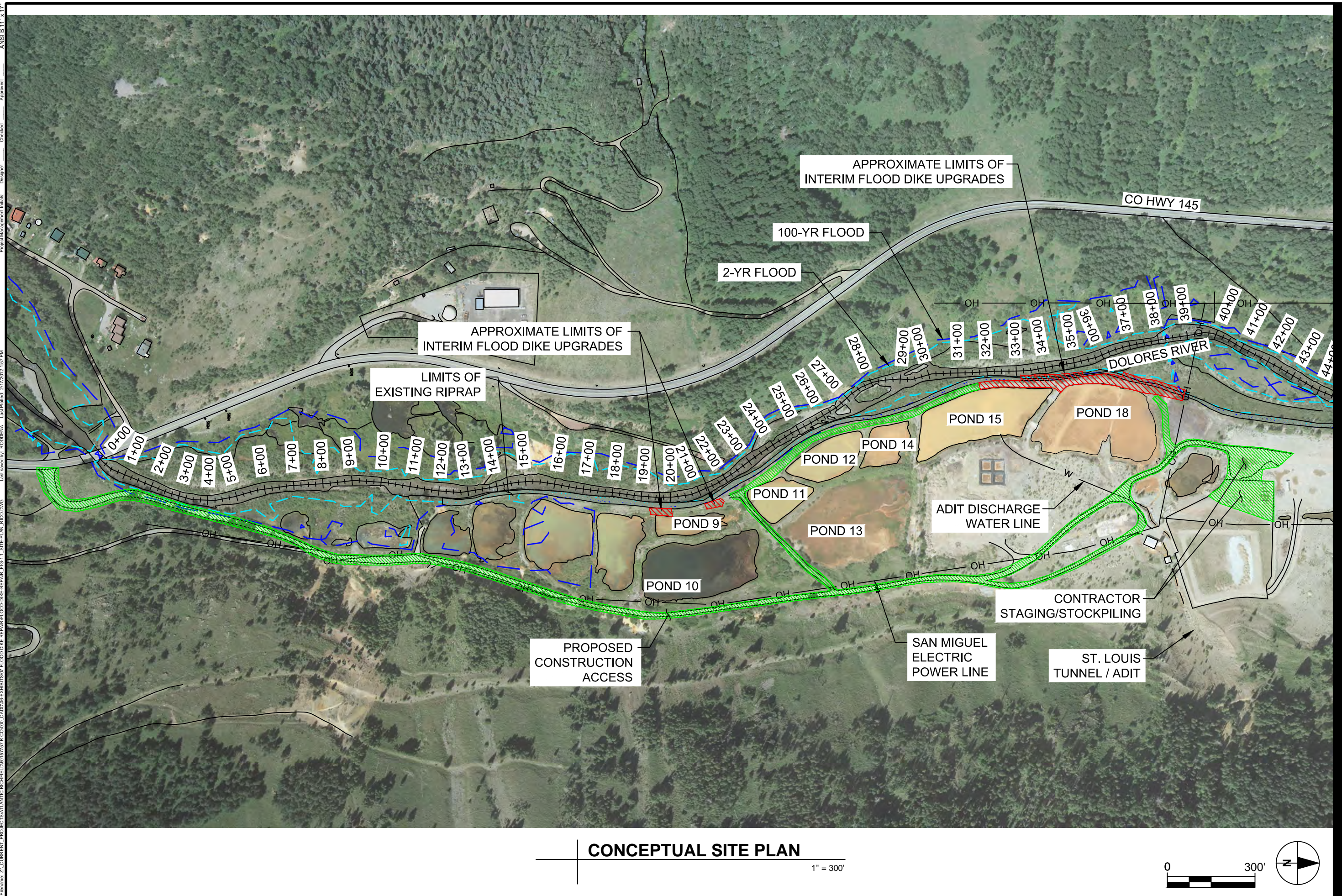
VICINITY MAP

FIGURE 1.1

Ms. Kara Hellige  
March 1, 2012  
Page 2 of 2

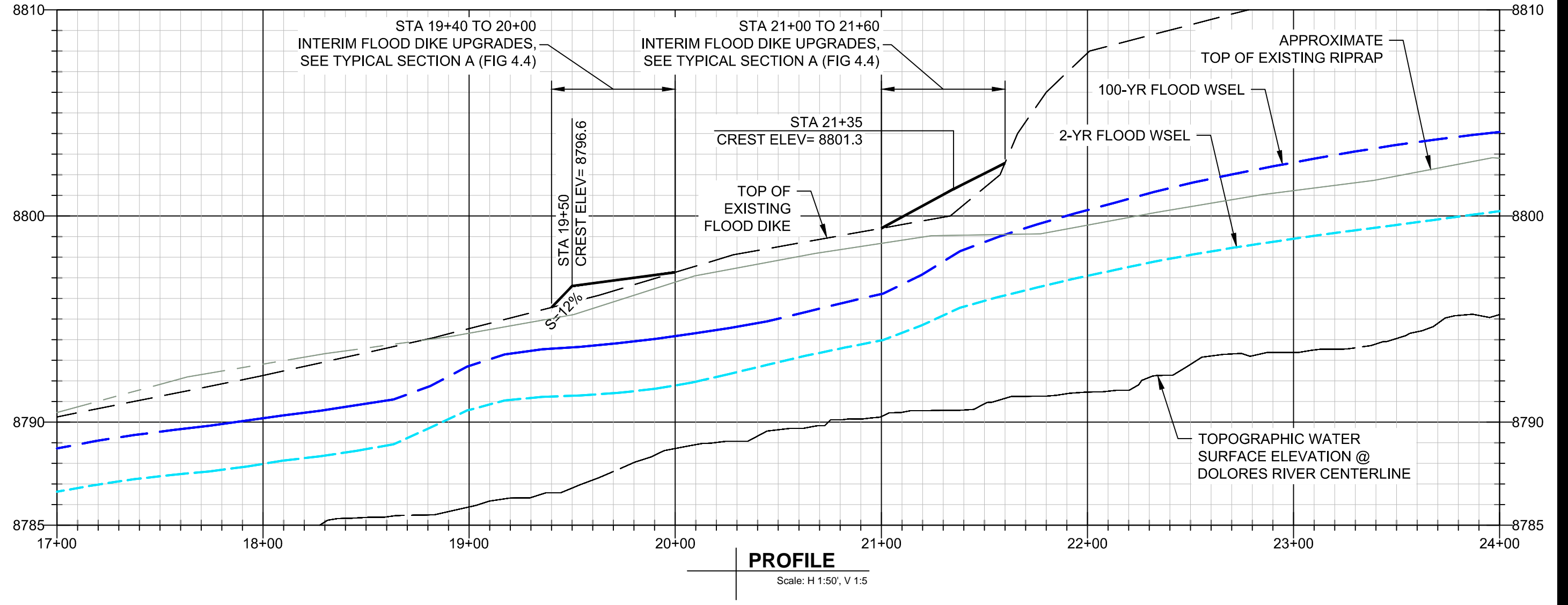
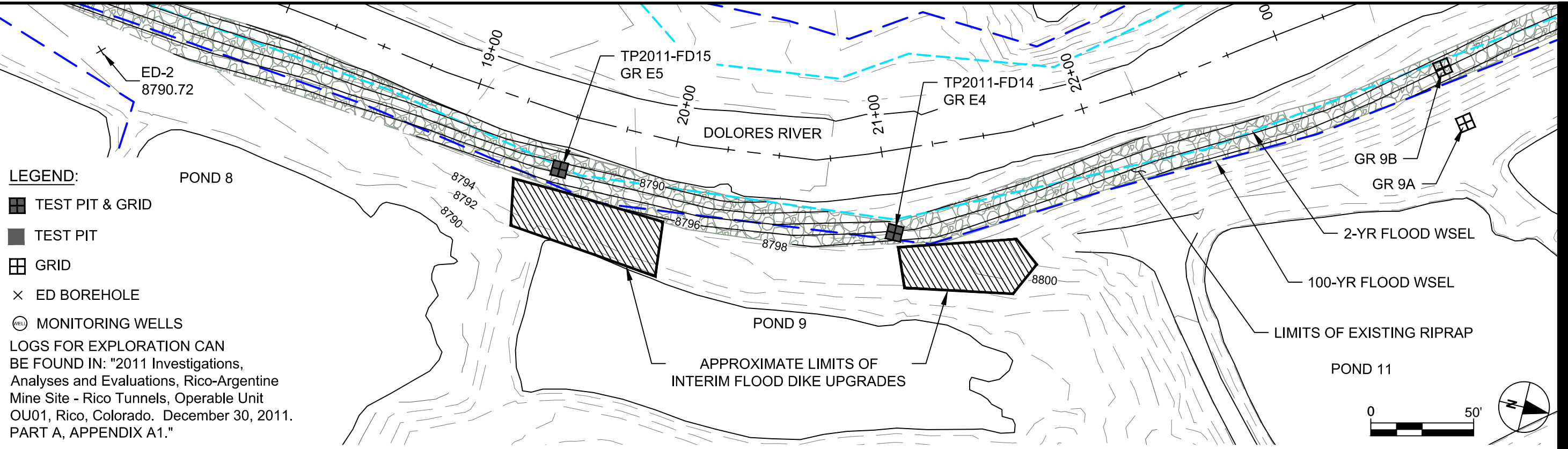
**Attachment C**  
Plan Drawings







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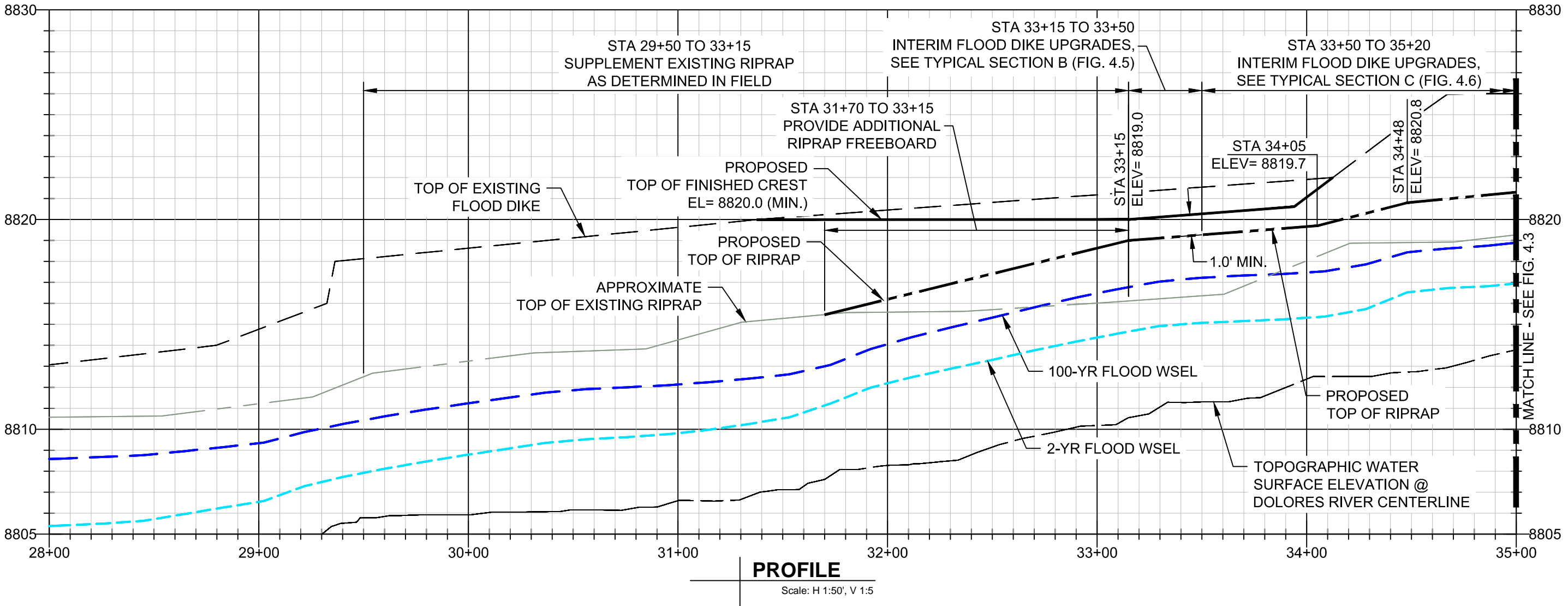
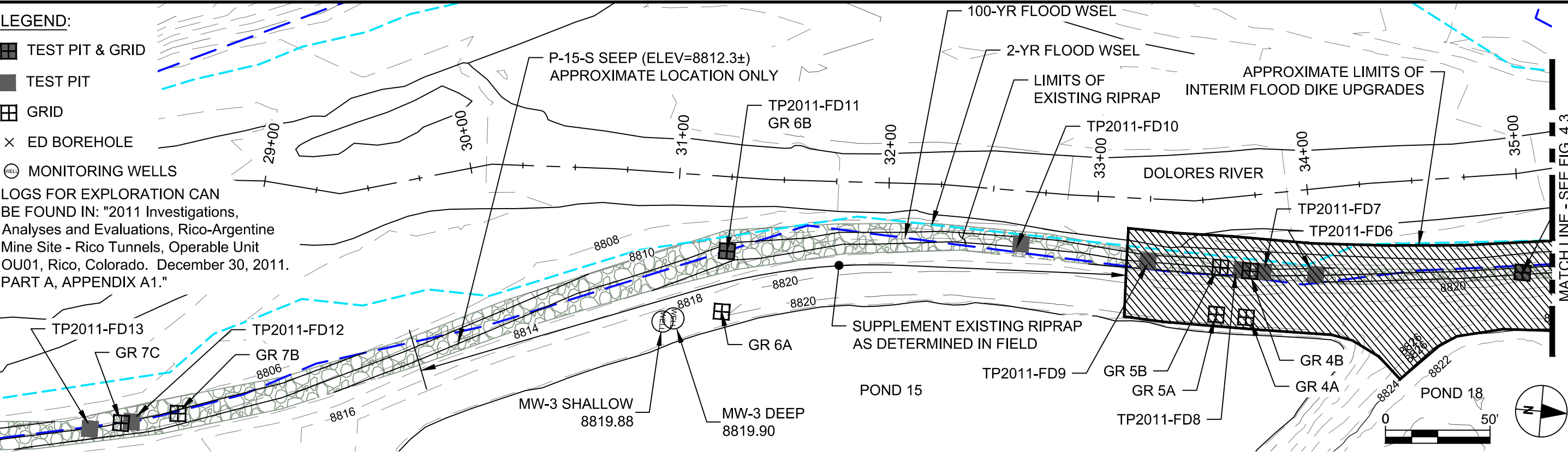


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**LEGEND:**

- TEST PIT & GRID
- TEST PIT
- GRID
- ED BOREHOLE
- MONITORING WELLS

LOGS FOR EXPLORATION CAN BE FOUND IN: "2011 Investigations, Analyses and Evaluations, Rico-Argentine Mine Site - Rico Tunnels, Operable Unit OU01, Rico, Colorado. December 30, 2011. PART A, APPENDIX A1."



**PROFILE**

Scale: H 1:50', V 1:5

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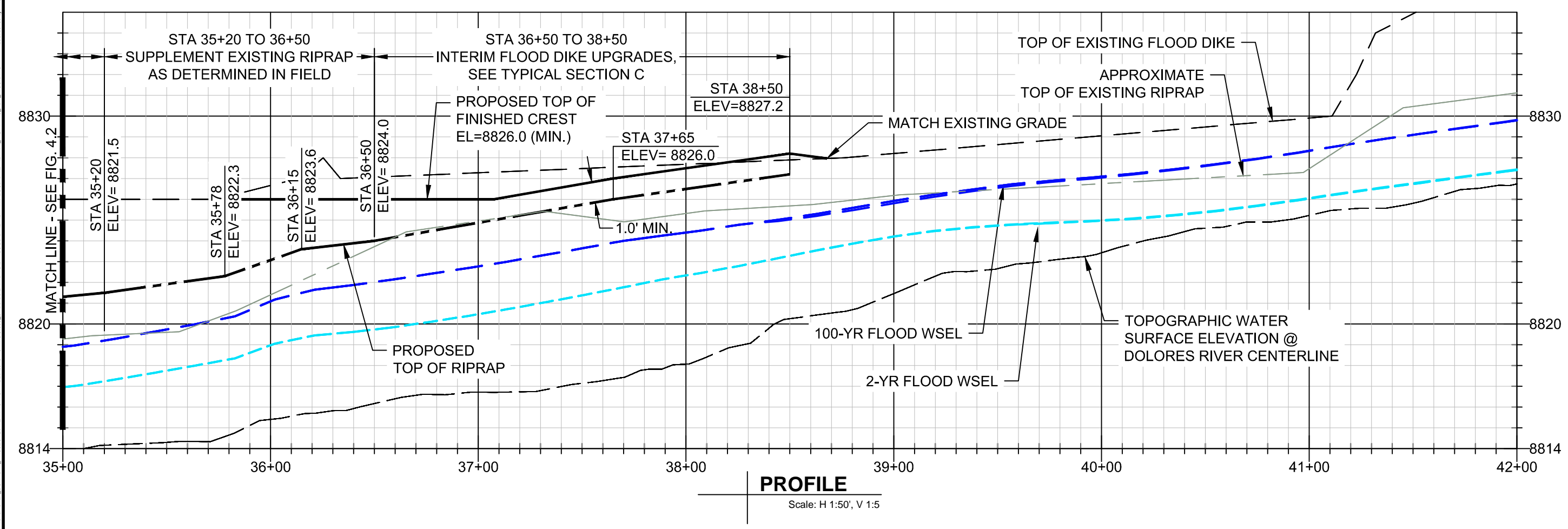
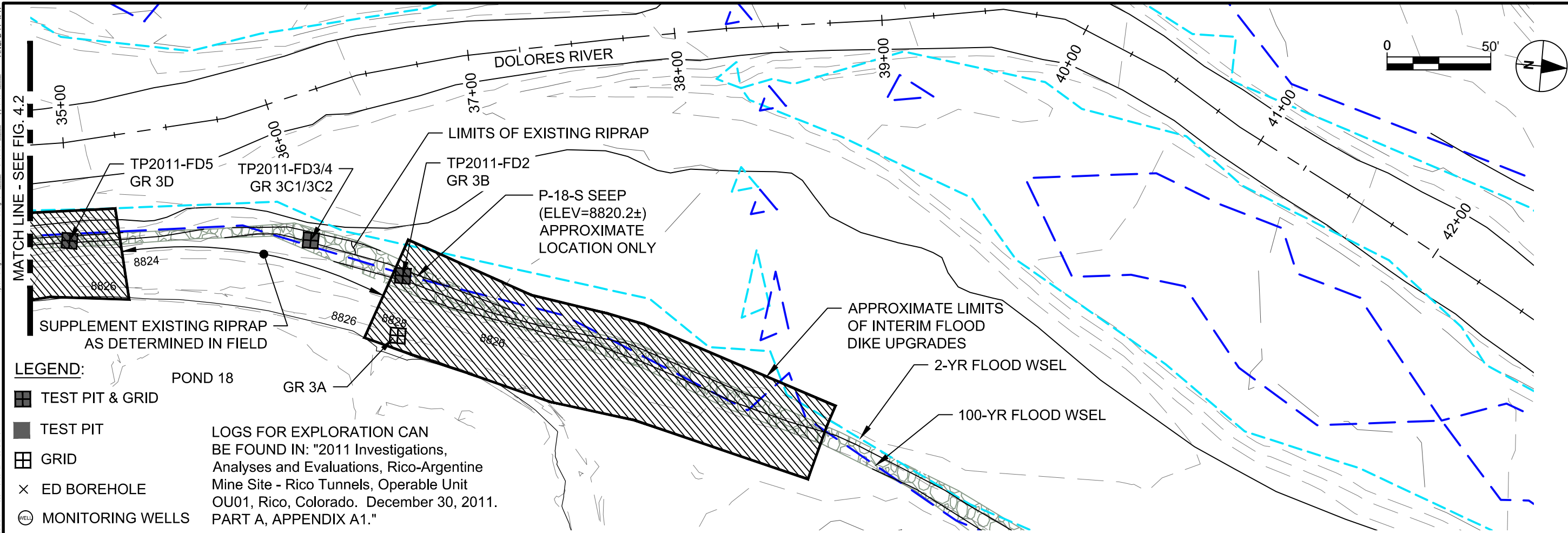
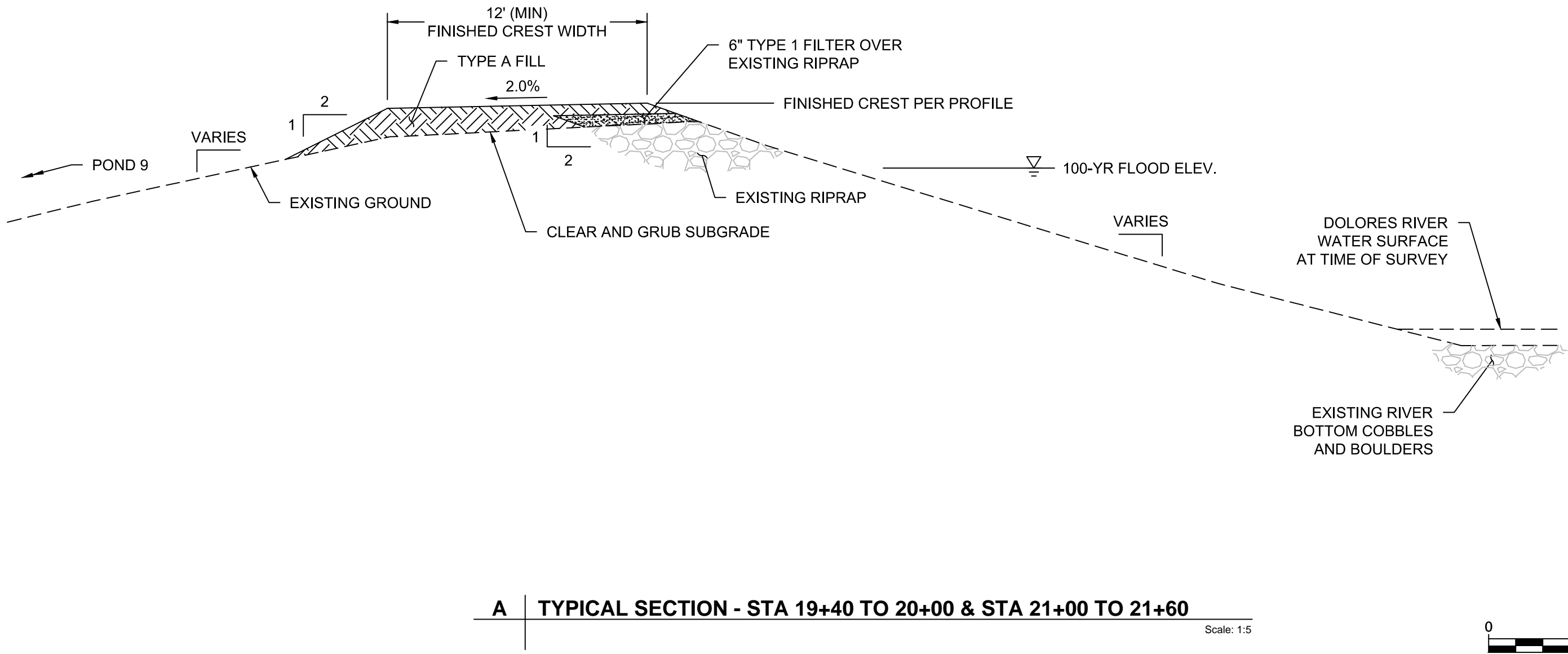




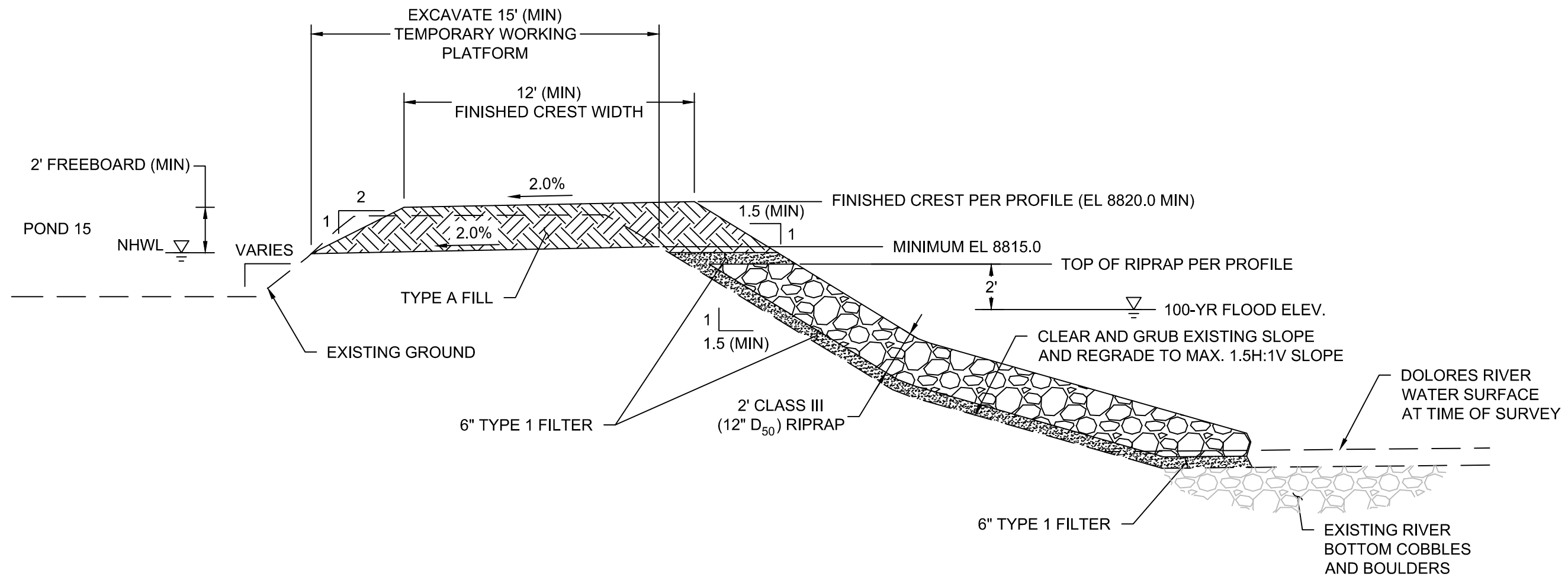
Figure: 21\_CIERENT - PROJECTS\ATLANTIC\CH\FIELD\60157757 RICO\000\_CADD\06-EXHIBITS\07 FLOOD DIKE REPAIR\FLOOD DIKE REPAIR\FLOOD DIKE REPAIR - FIG-4.4-6.TYP SECTION RICO.DWG      Last saved by: RODENA      Last Plotted: 2/17/2012 2:14 PM      Project Management Initials:      Designer:      Checked:      Approved:      ANSI B 11" x 17"



**A | TYPICAL SECTION - STA 19+40 TO 20+00 & STA 21+00 TO 21+60**



Figure: 21\_CIERENT - PROJECTS\ATLANTIC\CH\FIELD\60157757\_RICO\000\_CADD\06-EXHIBITS\07\_FLOOD DIKE REPAIR\FLOOD DIKE REPAIR\_FIG-4.4-6\_TYP SECTION\_RICO.DWG  
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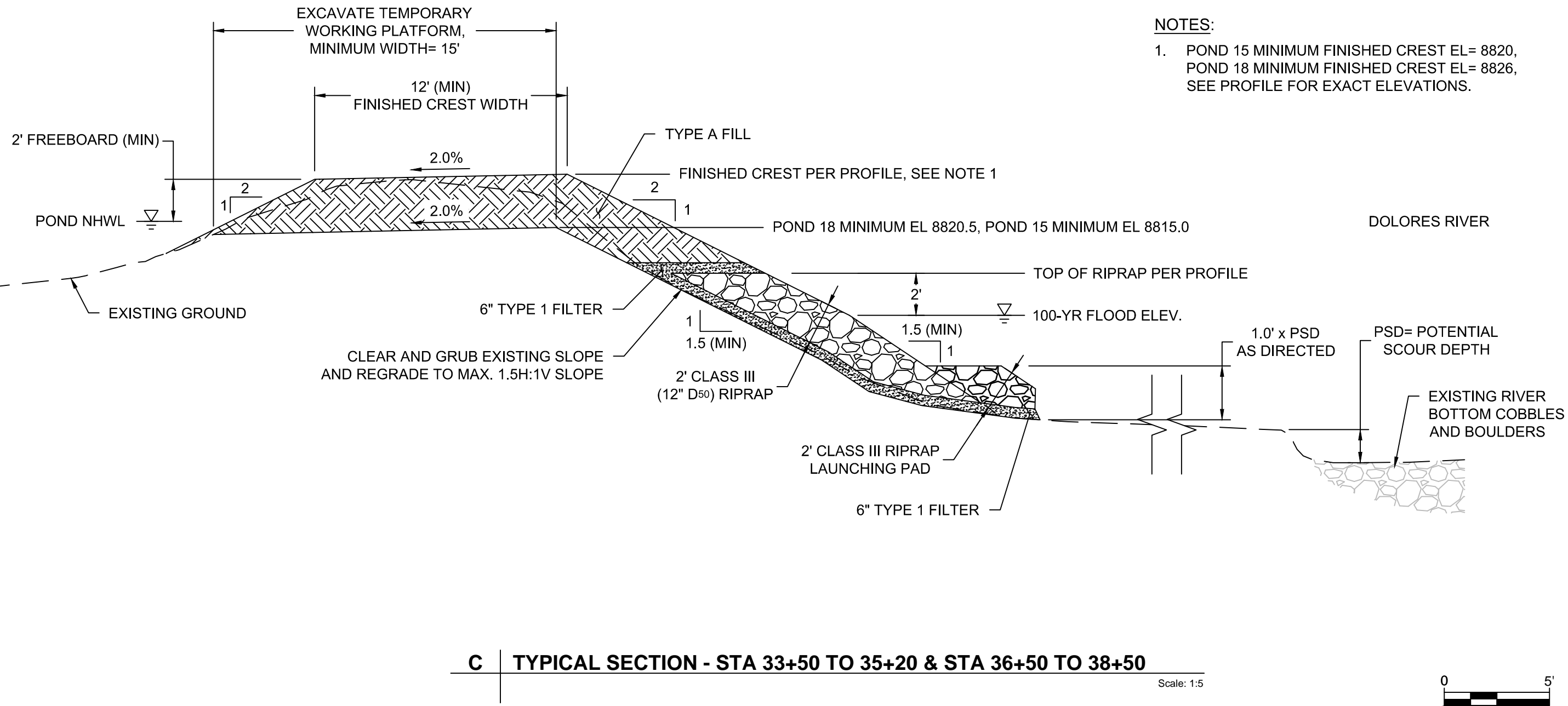


**B** | TYPICAL SECTION - STA 33+15 TO 33+50

Scale: 1:5



Figure: 21\_CIERENT - PROJECTS\ATLANTIC\CH\FIELD\60157757\_RICO\000\_CADD\06-EXHIBITS\07\_FLOOD DIKE REPAIR\FLOOD DIKE REPAIR\_FIG-4.4-6\_TYP SECTION\_RICO.DWG    Last saved by: RODENWA    Last Plotted: 2/17/2022 2:15 PM    Project Management Initials:    Designer:    Checked:    Approved:    ANSI B 11" x 17"



**Attachment D**

U.S. EPA Unilateral Administrative Order for Removal Action Letter  
(Dated March 23, 2011)

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

IN THE MATTER OF:

Rico-Argentine Site  
Dolores County, Colorado

Atlantic Richfield Company,  
Respondent

UNILATERAL ADMINISTRATIVE  
ORDER FOR REMOVAL ACTION

U.S. EPA Region 8

Docket No. **CERCLA-08-2011-0005**

Proceeding Under Sections 104, 106(a),  
107, and 122 of the Comprehensive  
Environmental Response,  
Compensation, and Liability Act, as  
amended, 42 U.S.C. §§ 9604, 9606(a),  
9607, and 9622

## TABLE OF CONTENTS

I.	JURISDICTION AND GENERAL PROVISIONS.....	3
II.	PARTIES BOUND.....	3
III.	DEFINITIONS.....	3
IV.	FINDINGS OF FACT.....	5
V.	CONCLUSIONS OF LAW AND DETERMINATIONS.....	7
VI.	ORDER.....	9
VII.	NOTICE OF INTENT TO COMPLY.....	9
VIII.	DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON- SCENE COORDINATOR.....	9
IX.	WORK TO BE PERFORMED.....	10
X.	AUTHORITY OF EPA ON-SCENE COORDINATOR.....	17
XI.	ENFORCEMENT: PENALITIES FOR NON-COMPLIANCE.....	17
XII.	REIMBURSEMENT OF OVERSIGHT COSTS.....	18
XIII.	RESERVATION OF RIGHTS.....	18
XIV.	OTHER CLAIMS.....	19
XV.	MODIFICATIONS.....	19
XVI.	NOTICE OF COMPLETION.....	20
XVII.	ACCESS TO ADMINISTRATIVE RECORD.....	20
XVIII.	OPPORTUNITY TO CONFER.....	20
XIX.	INSURANCE.....	20
XX.	FINANCIAL ASSURANCE.....	21
XXI.	SEVERABILITY.....	21
XXII.	EFFECTIVE DATE.....	21

## **I. JURISDICTION AND GENERAL PROVISIONS**

1. This Unilateral Administrative Order ("Order") is being issued by the United States Environmental Protection Agency ("EPA") to the Atlantic Richfield Company (hereinafter "AR" or "Respondent"). This Order is issued pursuant to the authority vested in the President of the United States by Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9606(a), ("CERCLA"), and delegated to the Administrator of EPA by Executive Order 12580, January 23, 1987, and further delegated to the Regional Administrators by EPA Delegation Nos. 14-14-A and 14-14-B. This authority was further re-delegated by the Regional Administrator of Region 8 to the Director of Preparedness, Assessment and Emergency Response, Office of Ecosystems Protection and Remediation by EPA Delegation Nos. 14-14-A and 14-14-B.
2. This Order pertains to property located at and around the Rico-Argetine Mine in Rico, Dolores County, Colorado ("the Site"). This Order requires the Respondent to conduct removal actions described herein to abate an imminent and substantial endangerment to the public health or welfare or the environment that may be presented by the actual or threatened release of hazardous substances at or from the Site.
3. EPA has notified the State of Colorado of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

## **II. PARTIES BOUND**

4. This Order applies to and is binding upon Respondent and Respondent's directors, officers, employees, agents, successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondent's responsibilities under this Order.
5. Respondent shall ensure that its contractors, subcontractors and representatives receive a copy of this Order and comply with this Order. Respondent shall be responsible for any noncompliance with this Order.

## **III. DEFINITIONS**

6. Unless otherwise expressly provided herein, terms used in this Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Order or in the attached appendices and incorporated hereunder, the following definitions shall apply:

- a. "Action Memorandum" shall mean the EPA Action Memorandum relating to the Site signed on January 11, 2011, by the Regional Administrator, Region 8, or his

delegate, and all attachments thereto. The Action Memorandum is attached as Appendix 1.

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 et seq.

c. "Day" shall mean a calendar day. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday or Federal holiday, the period shall run until the close of business of the next working day.

d. "Effective Date" shall be the effective date of this Order as provided in Section XXII.

e. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

f. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

g. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substance Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

h. "Order" shall mean this Unilateral Administrative Order, all appendices attached hereto and all documents incorporated by reference into this document including without limitation EPA-approved submissions. EPA-approved submissions (other than progress reports) are incorporated into and become a part of the Order upon approval by EPA. In the event of conflict between this Order and any appendix or other incorporated documents, this Order shall control.

i. "Paragraph" shall mean a portion of this Order identified by an Arabic numeral.

j. "Parties" shall mean EPA and Respondent.

k. "Respondent" shall mean the Atlantic Richfield Company.

l. "Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Order, including but not limited to payroll costs, contractor costs, travel costs, laboratory costs, and the costs incurred pursuant to Paragraph 37 (cost of attorney time) and Paragraph 42 (emergency response).



- m. "Section" shall mean a portion of this Order identified by a Roman numeral.
- n. "Site" shall mean the Rico-Argentine Superfund Site, located in Rico, Dolores County, Colorado and depicted generally on the map attached as Appendix 2.
- o. "State" shall mean the State of Colorado.
- p. "Waste Material" shall mean 1) any "hazardous substance under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); 3) any "solid waste" under Section 1004(2) of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6903(27); and 4) any "hazardous material" under 6 CCR 1007-3 et seq.
- q. "Work" shall mean all activities Respondent is required to perform under this Order, as more particularly described in the Removal Action Work Plan, dated March 10, 2011 ("Work Plan"), a copy of which is attached hereto and incorporated herein as Appendix 3, and any approved Work Plan modification made in accordance with Section IX of this Order.

#### **IV. FINDINGS OF FACT**

7. The Rico-Argentine Site is located in southwest Colorado, 25 miles southwest of the town of Telluride and just north of the town of Rico, within the northeastern corner of Dolores County. The Site is located in the San Juan Mountains, and within the Upper Dolores River Watershed. The Site consists of an adit (known as the St. Louis Tunnel) and associated underground mine-workings, as well as a series of settling ponds, some of which are back-filled, some of which contain sludge material. The Site is not listed on the National Priorities List ("NPL").

8. The St. Louis Tunnel adit drains historical mine workings extending several thousand feet into Telescope Mountain and Dolores Mountain to the east and southeast, respectively. The Site is or was directly hydraulically connected to the mine workings of the former Pigeon, Logan, Wellington, Mountain Spring, Argentine, Blaine, and Blackhawk mines in the area. The workings that are connected direct infiltrating groundwater to the St. Louis Tunnel. As groundwater travels through the workings, oxidation of mineralized rock increases the heavy metal concentrations in the discharging water.

9. The discharge from the adit was historically treated with lime precipitation to achieve permitted water quality standards at the outfall into the Dolores River. The lime caused some of the metals in the discharge to become insoluble and precipitate, forming a lime/heavy metal precipitate sludge in the bottom of the settling ponds. In 1996, active treatment of the discharge was discontinued. The permit for the discharge lapsed in 1999 and was not renewed. The ponds were abandoned, and still contain the lime/heavy metal sludge from treatment, currently discharging mine water, and calcine (iron oxide) tailings left over from a historic acid plant operation.



10. Early estimates of pond volume showed approximately 64,000 cubic yards of sludge. Priority ponds 18, 15, 14, 11, and 12 contain 44,200 cubic yards of sludge. Sediment sampling conducted within the pond system since 1996 shows the following ranges of metal concentrations in the pond sludge: 18,000 to 37,700 parts per million (“ppm”) zinc; 51.4 to 190 ppm cadmium; 650 to 2,460 ppm copper, and 200 to 957 ppm lead.

11. Pond 18, the pond closest to the adit, impounds approximately 20,000 cubic yards of sludge. In June 2010, sludge and water in Pond 18 were measured to be less than 12 inches from the top of the dike embankment. In October 2010, Atlantic Richfield enacted temporary measures to reduce the volume of Pond 18; however, no permanent actions have been taken. Pond 18 is adjacent to the Dolores River. A release of the sludge in the ponds may have an immediate negative impact on downstream aquatic populations, killing fish and further degrading water quality in the Dolores River.

12. The construction material and geotechnical stability of the settling ponds are unknown. Construction of the ponds was completed in the 1950’s, and the ponds have been modified over time. The ponds are surrounded by earthen berms, or dikes. The longest berm runs the entire half-mile length of the west side of the Site, along the Dolores River. The berms are partially armored with riprap. The preliminary flood plan analysis indicates that the ponds lie within the 100-year flood plain; however, the hydraulic conditions that may occur during a flood event have not been evaluated against the embankment armoring.

13. In April 2000, EPA Region 8’s Emergency Response Program responded to a request from the Town of Rico to address a breach, due to a lack of maintenance, on the berm of Pond 18. The pond containment failed, and sediments laden with hazardous substances discharged directly into the Dolores River. EPA’s response consisted of raising and reinforcing the riverside embankment of the pond, adding an additional culvert between the pond and downgradient ponds, and installing overflow riprap as a backup drain path. EPA’s emergency response did not extend to stability analysis of any other ponds.

14. The settling ponds are unlined, and substantial releases of contaminated mine water to the river alluvium occur from leakage. An investigation into flow rates showed that the discharge flow from the adit was 2,200 gallons per minute (“gpm”). Inflow from Pond 18 was 1,600 gpm; Pond 9 inflow was 1,200 gpm; and inflow to Pond 5, which flows directly into the Dolores River, was measured to be 1,400 gpm. This shows approximately 40 percent loss of flow from the ponds due largely to leakage into the alluvial groundwater system.

15. Hazardous substances present in the adit discharge include cadmium, copper, lead, silver, and zinc, all of which are being released into the environment. As presented in the State Water Quality Analysis (“WQA”), the current water quality standard for zinc for that segment of the Dolores River is 269 µg/L (chronic) and 310 µg/L (acute). The results of samples taken directly from the mouth of the St. Louis Tunnel adit in June 2010 revealed dissolved zinc concentrations at 7,700 µg/L. Available historical sample data

indicate that zinc concentrations in the drainage from the adit range from approximately 3,000 µg/L to approximately 5,000 µg/L.

16. In June 2010, the zinc concentration in the discharge from the outfall at Pond 5, flowing into the Dolores River, was 3,900 µg/L. Historical data collected from the Pond 5 outfall indicate that zinc concentrations in the discharge to the river are increasing. Data from outfall reported to the State by the Respondent, for example, show zinc concentrations of 410 µg/L in July 2002, 1,120 µg/L in 2003, and 3,100 µg/L in December 2004.

17. The records of discharge rates from the adit reported in the WQA range from 2 to 3.3 cubic feet per second ("cfs"). The low flow predictions for the Dolores River seasonally range from approximately 3.2 to 45 cfs. Calculations from the WQA indicate that zinc concentrations currently discharging from the pond system outfall would exceed the low flow assimilative capacity of the Dolores River. Similar to zinc concentrations, cadmium concentrations are also expected to exceed water quality standards based on similar potential low flow conditions and recent concentrations in the discharge.

18. In 1944, Rico Argentine Mining Company ("RAMCO") purchased the St. Louis Tunnel from St. Louis Smelting and Refining Company. RAMCO, while operating the mine in Rico, underwent various mergers, and in 1977, was a division of Crystal Exploration and Production Company ("CEPCO"). In 1980, The Anaconda Company ("Anaconda") purchased substantially all of CEPCO's assets in Rico, including the Site. Anaconda was an "owner" or "operator" of the facility at the time of disposal of hazardous substances at the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2). In 1977, Atlantic Richfield purchased all of the stock of the Anaconda Company, and in 1981 Atlantic Richfield merged with Anaconda.

## **V. CONCLUSIONS OF LAW AND DETERMINATIONS**

Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

19. The Rico-Argentine Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

20. The contaminants found at the Site, as identified in the Findings of Fact above, include "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

21. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

22. Respondent is liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

Respondent is the successor to the liabilities of Anaconda under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is liable for the performance of response actions and for response costs incurred and to be incurred at the Site.

23. The conditions described in the Findings of Fact above constitute an actual and/or threatened "release" of a hazardous substance from the facility into the environment as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

24. The conditions at the Site constitute an imminent and substantial endangerment to public health, welfare, or the environment, based on the factors set forth in Section 300.415(b)(2) of the NCP, as amended, 40 C.F.R. Part 300. These factors include, but are not limited to, the following:

*a. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;*

This factor is present at the Site due the existence of cadmium, copper, lead, silver, and zinc discharging from both the adit and the sediment-laden settling ponds into the Dolores River.

*b. Actual or potential contamination of drinking water supplies or sensitive ecosystems;*

This factor is present at the Site due to ongoing discharge to the Dolores River, and the existence of over 64,000 cubic yards of sediments and sludges, including cadmium, copper, lead, silver and zinc in the floodplain of the Dolores River.

*c. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; and*

This factor is present at the Site due to the high snowfall potential and seasonal runoff from snow melt, and the existence of inadequately designed and constructed settling ponds lying within the 100-year floodplain of the Dolores River.

*d. The unavailability of other appropriate federal or State response mechanisms to respond to this release.*

This factor is present at the Site due to the absence of State or local resources and authority to implement a response.

25. The actual or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. 9606(a).

26. The removal actions required by this Order are necessary to protect the public health, welfare, or the environment, and are not inconsistent with the NCP and CERCLA.

## **VI. ORDER**

27. Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, EPA hereby orders that Respondent comply with all provisions of this Order and any modifications thereto, including, but not limited to, all attachments to this Order, all documents incorporated by reference into this Order and all schedules and deadlines in this Order, attached to this Order, or incorporated by reference into this Order.

## **VII. NOTICE OF INTENT TO COMPLY**

28. Respondent shall notify EPA in writing within 14 days after the Effective Date of this Order of Respondent's irrevocable intent to comply with this Order. Failure of Respondent to provide such notification within this time period shall be a violation of this Order by Respondent.

## **VIII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR AND ON-SCENE COORDINATOR**

29. Respondent shall perform the Work itself or retain a contractor(s) to perform the Work. Respondent shall notify EPA of Respondent's qualifications or the name(s) and qualification(s) of such contractor(s) within fifteen (15) business days of the Effective Date of this Order. Respondent shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the removal action under this Order at least fifteen (15) days prior to commencement of such removal action. The proposed contractor must demonstrate compliance with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01-002, March 2001) or equivalent documentation as determined by EPA. EPA retains the right, at any time, to disapprove of any, or all, of the contractors and/or subcontractors retained by the Respondent, or of Respondent's choice of itself to do the removal action. If EPA disapproves of a selected contractor or subcontractor, or of Respondent's decision to perform the Work, Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within fourteen (14) days of EPA's disapproval. Alternatively, Respondent may notify EPA that it will perform the removal action itself, within fifteen (15) days following EPA's disapproval.

30. Within fourteen (14) days after the Effective Date of this Order, Respondent shall designate a Project Coordinator who shall be responsible for administration of all Respondent's actions required by the Order, and shall submit in writing to EPA the designated coordinator's name, address, telephone number, email address, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on



Site or readily available during Site work. EPA retains the right to disapprove of any Project Coordinator named by Respondent. If EPA disapproves of a selected Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, email address, and qualifications within 5 business days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Order shall constitute receipt by Respondent.

- a. EPA has designated Steven Way of the Region 8 Emergency Response Program as its On-Scene Coordinator ("OSC"). Respondent shall direct all submissions required by this Order to the OSC at Emergency Response Program (8EPR-SA), 1595 Wynkoop St., Denver, CO, 80202-1129, except as otherwise indicated herein.

## **IX. WORK TO BE PERFORMED**

31. Respondent shall perform, at a minimum, the following removal action in accordance with the Work Plan:

- a. Management of precipitation solids in the settling ponds below the St. Louis Tunnel adit discharge, including partial removal of solids from the upper ponds;
- b. Construction of an on-Site solids repository in accordance with the siting requirements of the Colorado HMWMD and Dolores County;
- c. Investigation of actions that can be feasibly implemented at the collapsed St. Louis Tunnel portal to stabilize the adit opening and consolidate adit flows;
- d. Development of a preliminary design (30%) for appropriate hydraulic controls at or near the adit opening to manage flows entering the treatment system;
- e. Construction, as appropriate, of hydraulic controls at or near the adit opening to manage flows;
- f. Development of a preliminary (30%) design for a new treatment system for the St. Louis Tunnel adit discharge, including upgrades to pond embankments and hydraulic structures. The preliminary design will be based, in part, on the Water Quality Assessment. The preliminary design objective will be achievement of numeric effluent limitations specified under a CDPS permit to be issued by the Colorado WQCD for the discharge from the ponds system to the Dolores River; and
- g. Construction of a water treatment system to address the adit discharge.

32. Work Plan and Implementation

a. The final Work Plan is attached to this Order as Appendix 3. Respondent shall prepare and submit a Quality Assurance Project Plan ("QAPP") as part of the Work Plan. The QAPP shall be prepared in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001), and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February, 1998).

b. Respondent shall implement the Work Plan in accordance with the schedule provided by EPA. The Work Plan, schedule, and any subsequent modifications shall be fully enforceable under this Order. Respondent shall notify EPA at least 7 days prior to performing any on-Site Work pursuant to the EPA-approved Work Plan. Respondent shall not commence or undertake any removal actions at the Site without prior EPA approval.

33. Health and Safety Plan

a. Within 30 days after the Effective Date of this Order, the Respondent shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-Site work under this Order ("HASP"). This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all current applicable Occupational Safety and Health Administration regulations; Hazardous Waste Operations and Emergency Response found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. Respondent shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the removal actions.

34. Quality Assurance and Sampling

a. All sampling and analyses performed pursuant to this Order shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondent shall follow the following documents, as appropriate, as guidance for QA/QC and sampling: "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures," OSWER Directive Number 9360.4-01, April 1, 1990; "Environmental Response Team Standard Operating Procedures," OSWER Directive Numbers 9360.4-02 through 9360.4-08.

b. Upon request by EPA, Respondent shall have such a laboratory analyze samples submitted by EPA for quality-assurance monitoring. Respondent shall provide to EPA the quality assurance/quality control procedures followed by all sampling teams

and laboratories performing data collection and/or analysis. Respondent shall only use laboratories that have a documented quality system which complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995) and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP") as meeting the quality system requirements. Respondents shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

c. Upon request by EPA, Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Respondent while performing actions under this Order. Respondent shall notify EPA not less than 7 days in advance of any sample collection activity. EPA shall have the right to take any additional samples that it deems necessary.

d. Post-Removal Site Control. In accordance with the Work Plan schedule, or as otherwise directed by EPA, Respondent shall submit a proposal for post-removal site control consistent with Section 300.415(l) of the NCP and OSWER Directive No. 9360.2-02. Upon EPA approval, Respondent shall implement such controls and shall provide EPA with documentation of all post-removal site control arrangements. If the State of Colorado issues a Colorado Discharge Permit and a Certificate of Designation, they shall be considered post-removal site controls.

### 35. Reporting

a. Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this Order on the 5th day of each month, beginning the first month after the start of Work, until termination of this Order, unless otherwise directed by the OSC in writing. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of work to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

b. Respondent shall submit 3 copies of all plans, reports or other submissions required by this Order, or any approved Work Plan. Upon request by EPA, Respondent shall submit such documents in electronic form.

c. Respondent shall, at least 30 days prior to the conveyance of any interest in real property at the Site, give written notice of this Order to the transferee and written notice to EPA (and the State) of the proposed conveyance, including the name and address of the transferee. The party conveying such interest shall require that the transferee comply with Section IX, Paragraphs 37 and 38 of this Order – Access to Property and Information.

d. Any transferee shall be required to comply with this Order while the Work is being completed. At the completion of the Work, any transferee shall comply with any post-removal site controls.

36. Final Report Within 30 days after all Work has been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Order. The final report shall conform, at a minimum, with the requirements set forth in the Work Plan and in "Superfund Removal Procedures: Removal Response Reporting – POLREPS and OSC Reports" (OSWER Directive No. 9360.3-03, June 1, 1994). The final report shall include a good faith estimate of total costs or statement of actual costs incurred in complying with the Order, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g. manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

37. Access to Property

a. Respondent shall provide and/or obtain access to the Site and off-Site areas to which access is necessary to implement this Order, and provide access to all records and documentation related to the conditions at the Site and the actions conducted pursuant to this Order. Such access shall be provided to EPA employees, contractors, agents, consultants, designees, representatives, and State of Colorado representatives. These individuals shall be permitted to move freely at the Site and appropriate off-Site areas in order to conduct actions which EPA determines to be necessary. Respondent shall submit to EPA, upon request, the results of all sampling or tests and all other data generated by Respondent or its contractors, or on Respondent's behalf during implementation of this Order.

b. Where action under this Order is performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within 14 days after the Effective Date of this Order, or as otherwise specified in writing by the OSC. Respondent shall immediately notify EPA if, after using its best efforts, it is unable to obtain such agreements. Respondent shall describe in writing its efforts to obtain access. EPA may then assist Respondent in



gaining access, to the extent necessary to effectuate the removal actions described herein, using such means as EPA deems appropriate. EPA reserves the right to seek reimbursement from Respondent for all costs and attorney's fees incurred by the United States in obtaining access for Respondent.

38. Access to Information

a. Respondent shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents related to activities at the Site or to the implementation of this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence or other documents or information related to the Work.

b. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Order to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if EPA notified Respondents that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent. Respondent shall segregate and clearly identify all documents or information submitted under this Order for which Respondent asserts business confidentiality claims.

c. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: 1) the title of the document, record or information; 2) the date of the document, record or information; 3) the name and title of the author of the document, record or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Order shall be withheld on the grounds that they are privileged.

d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical or engineering data, or any other documents or information evidencing conditions at or around the Site.

39. Record Retention

a. Until 10 years after Respondent's receipt of EPA's notification pursuant to Section XVI (Notice of Completion of Work), Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 10 years after Respondent's notification pursuant to Section XVI (Notice of Completion of Work), Respondent shall also instruct its contractors and agents to preserve all non-identical copies of records and documents (including records or documents in electronic form) and any additional information of whatever kind, nature or description relating to performance of the Work.

b. At the conclusion of this document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA, Respondent shall deliver any such records or documents to EPA. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA with the following: 1) the title of the document, record or information; 2) the date of the document, record or information; 3) the name and title of the author of the document, record or information; 4) the name and title of each addresses and recipient; 5) a description of the subject of the document, record or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Order shall be withheld on the grounds that they are privileged.

40. Off-Site Shipments

a. Respondent shall, prior to any off-Site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the On-Scene Coordinator. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

i. Respondent shall include in the written notification the following information: 1) the name and location of the facility to which the Waste Material is to be shipped; 2) the type and quantity of the Waste Material to be shipped; 3) the expected schedule for the shipment of the Waste Material; and 4) the method of transportation. Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

ii. The identity of the receiving facility and state will be determined by Respondent following the award of the contract for the removal action. Respondent shall

provide the information required by Paragraph 40(a) and 40(b) as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

b. Before shipping any hazardous substances, pollutants or contaminants from the Site to an off-Site location, Respondent shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent shall only send hazardous substances, pollutants, or contaminants from the Site to an off-Site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

#### 41. Compliance With Other Laws

Respondent shall perform all actions required pursuant to this Order in accordance with all applicable local, State, and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(i), all on-Site actions required pursuant to this Order shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental, State environmental, or facility siting laws.

#### 42. Emergency Response and Notification of Releases

a. If any incident, or change in Site conditions, during the actions conducted pursuant to this Order causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare, or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Order, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the OSC or, in the event of his unavailability, shall notify the Regional Duty Officer (Emergency Planning and Response, EPA Region 8, 303.293.1788) of the incident or Site conditions. If Respondent fails to take action, then EPA may respond to the release or endangerment and reserves the right to pursue cost recovery.

b. In addition, in the event of any release of a hazardous substance, Respondent shall immediately notify EPA's OSC (303.312.6723) and the National Response Center (800.424.8802). Respondent shall submit a written report to EPA within seven (7) days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, not in lieu of, reporting under CERCLA Section 103(c) and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. §11001 et seq.

## **X. AUTHORITY OF EPA ON-SCENE COORDINATOR**

43. The OSC shall be responsible for overseeing the proper and complete implementation of this Order. The OSC shall have the authority vested in an OSC by the NCP, 40 C.F.R. 300.120, including the authority to halt, conduct, or direct any action required by this Order, or to direct any other removal action undertaken by EPA or Respondent at the Site. Absence of the OSC from the Site shall not be a cause for stoppage of work unless specifically directed by the OSC.

44. EPA and Respondent shall have the right to change their designated OSC or Project Coordinator. EPA shall notify Respondent, and Respondent shall notify EPA within 10 days, before such a change is made. Notification may initially be made orally, but shall be followed promptly by written notice.

## **XI. ENFORCEMENT: PENALTIES FOR NONCOMPLIANCE**

45. Violation of any provision may subject Respondent to civil penalties of up to thirty-seven thousand, five hundred dollars (\$37,500) per violation per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1). Respondent may also be subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Should Respondent violate this Order or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. 9604, and/or may seek judicial enforcement of this Order pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606.

46. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondent's receipt from EPA of a demand for payment of penalties. All payments made to EPA under this Section shall be paid by Fedwire Electronic Funds Transfer in accordance with Paragraph 48 or by official bank check made payable to "EPA Hazardous Substances Superfund." Payments shall indicate that the payment is for Stipulated Penalties, shall reference the EPA Region and Site/Spill ID Number (08-BU; OU01), the EPA Docket Number for this action, and the name and address of the party making payment, and shall be sent to:

Regular Mail: U.S. Environmental Protection Agency  
Fines and Penalties  
Cincinnati Finance Center  
PO Box 979077  
St. Louis, MO 63197-9000

FedEx or Express: U.S. Bank  
Government Lockbox 979077



U.S. EPA Fines and Penalties  
1005 Convention Plaza  
SL-MO-C2-GL  
St. Louis, MO 63101

## **XII. REIMBURSEMENT OF OVERSIGHT COSTS**

47. Respondent shall reimburse EPA, upon written demand, for all response costs incurred by the United States in overseeing Respondent's implementation of the requirements of this Order. EPA may submit to Respondent on a periodic basis a bill for all response costs incurred by the United States with respect to this Order. EPA's cost summary, as certified by EPA, shall serve as the basis for payment demands.

48. Within 30 days of receipt of bill, payment shall be made to EPA by Fedwire Electronic Funds Transfer to:

Federal Reserve Bank of New York  
ABA: 021030004  
Account Number: 68010727  
Field Tag 4200 of the Fedwire message should read "D 68010727  
Environmental Protection Agency"

a. Respondent shall simultaneously transmit a copy of the check to Martha Walker, 8TMS-F, 1595 Wynkoop, Denver, CO 80202. Payments shall be designated as "Response Costs- Rico Argentine Site" and shall reference the payor's name and address, the EPA site identification number (08-BU), and the docket number of this Order. The total amount to be paid by Respondent pursuant to Paragraph 47 shall be deposited by EPA in the Rico-Argentine Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

49. Interest at the rate established under Section 107(a) of CERCLA shall begin to accrue on the unpaid balance from the day of the original demand notwithstanding any dispute or objection to any portion of the costs.

## **XIII. RESERVATION OF RIGHTS**

50. Except as specifically provided in this Order, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment, or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any

other applicable law. EPA reserves the right to bring an action against Respondent under Section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any response costs incurred by the United States related to this Order or the Site and not reimbursed by Respondent.

#### **XIV. OTHER CLAIMS**

51. By issuance of this Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Order.

52. This Order does not constitute a pre-authorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2).

53. Nothing in this Order shall constitute a satisfaction of, or release from, any claim or cause of action against the Respondent or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including, but not limited to, any claims of the United States for costs, damages and interest under Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a), 9607(a).

#### **XV. MODIFICATIONS**

54. Modifications to any plan or schedule (or the attached EPA Work Plan) may be made in writing by the OSC or at the OSC's oral direction. If the OSC makes an oral modification, it will be memorialized in writing within 5 days; provided, however, that the effective date of the modification shall be the date of the OSC's oral direction. Any other requirement of this Order may be modified in writing by the signature of the Director, Preparedness, Assessment and Emergency Response, Office of Ecosystems Protection and Remediation.

55. If Respondent seeks permission to deviate from any approved plan or schedule (or Work Plan), Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving approval from the OSC pursuant to Paragraph 54.

56. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Order, or to comply with all requirements of this Order, unless it is formally modified.

## **XVI. NOTICE OF COMPLETION**

57. When EPA determines, after EPA's review of the Final Report, that all removal actions have been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, EPA will provide notice to Respondent. If EPA determines that any removal actions have not been completed in accordance with this Order, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Work Plan shall be a violation of this Order.

## **XVII. ACCESS TO ADMINISTRATIVE RECORD**

58. The Administrative Record supporting this removal action will be available for review within 60 days after initiation of on-Site removal actions described herein at the Records Center at EPA Region 8 Headquarters, 1595 Wynkoop, Denver, CO 80202, as well as the Rico Town Hall.

## **XVIII. OPPORTUNITY TO CONFER**

59. Within 5 days after issuance of this Order, Respondent may request a conference with EPA. Any such conference shall be held within 14 days after the Effective Date unless extended by agreement of the parties. At any conference held pursuant to the request, Respondent may appear in person or be represented by an attorney or other representative.

60. If a conference is held, Respondent may present any information, arguments or comments regarding this Order. Regardless of whether a conference is held, Respondent may submit any information, arguments or comments in writing to EPA within 14 days following the conference. This conference is not an evidentiary hearing, does not constitute a proceeding to challenge this Order, and does not give Respondent a right to seek review of this Order. Requests for a conference or any written submittal under this paragraph shall be directed to Amelia Piggott, 8ENF-L, 1595 Wynkoop, Denver, CO 80202-1129.

## **XIX. INSURANCE**

61. At least seven (7) days prior to commencing any on-Site work under this Order, Respondent shall secure, and shall maintain for the duration of this Order, comprehensive general liability insurance and automobile insurance with limits of 1 million dollars, combined single limit. Within the same time period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. In addition, for the duration of the Order, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of

worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Order. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

## **XX. FINANCIAL ASSURANCE**

62. Within 30 days of the Effective Date, Respondent shall establish and maintain financial security in the amount of \$6 million in the form of an irrevocable letter of credit equaling the total estimated cost of the work. Respondent shall send a copy of the letter of credit to Daniela Golden, 8 ENF-RC, 1595 Wynkoop, Denver, CO, 80202-1129.

63. Any and all financial assurance instrument(s) provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined at EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section are inadequate, Respondent shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval another form of financial assurance. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Order.

64. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 62 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of security after receiving written approval from EPA. Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

## **XXI. SEVERABILITY**

65. If a court issues an order that invalidates any provision of this Order or finds that Respondent has sufficient cause not to comply with one or more provisions of this Order, Respondent shall remain bound to comply with all provisions of this Order not invalidated or determined to be subject to a sufficient cause defense by the court's order.

## **XXII. EFFECTIVE DATE**

66. This Order shall be effective 7 days after the Order is signed by the Regional Administrator or his delegate unless a conference is requested as provided herein. If a



conference is requested, this Order shall be effective on the 7<sup>th</sup> day following the day of the conference unless modified in writing by EPA.

IT IS SO ORDERED

BY: David L. Ostrander *For*

DATE: 3/16/11

David Ostrander, Director  
Emergency Preparedness, Assessment  
and Emergency Response  
Office of Ecosystems Protection and Remediation  
Region 8  
U.S. Environmental Protection Agency

EFFECTIVE DATE: 3/23/11

Ms. Kara Hellige  
March 1, 2012  
Page 2 of 2

**Attachment E**  
U.S. EPA UAO Amendment to Order  
(Dated March 28, 2011)

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

2011 MAR 28 PM 12:52

FILED  
EPA REGION VIII  
HEARING CLERK

IN THE MATTER OF:

Rico-Argentine Site  
Dolores County, Colorado

Atlantic Richfield Company,  
  
Respondent

AMENDMENT TO UNILATERAL  
ADMINISTRATIVE ORDER FOR  
REMOVAL ACTION

U.S. EPA Region 8

Docket No. CERCLA-08-2011-0005

Proceeding Under Sections 104, 106(a),  
107, and 122 of the Comprehensive  
Environmental Response,  
Compensation, and Liability Act, as  
amended, 42 U.S.C. §§ 9604, 9606(a),  
9607, and 9622

1. This Unilateral Administrative Order Amendment ("Amendment") is being issued by the United States Environmental Protection Agency ("EPA") to the Atlantic Richfield Company (hereinafter "AR" or "Respondent"). This document amends EPA's March 17, 2011 Unilateral Administrative Order ("UAO"), which was issued to Atlantic Richfield and ordered it to perform certain removal actions in Rico, Dolores County, Colorado.

2. Paragraph 62 of the UAO required Respondent to "send a copy of the letter of credit to Daniela Golden, 8 ENF-RC, 1595 Wynkoop, Denver, CO 80202-1129." This document hereby amends that language such that Respondent shall send **the original** letter of credit to Daniela Golden, 8 ENF-RC, 1595 Wynkoop, Denver, CO 80202-1129.

3. In all other respects, the March 17, 2011 UAO referred to above continues to remain in full force and effect.

THE ORDER IS SO AMENDED

BY: David L. Ostrander *ACTKUC*  
David Ostrander, Director  
Emergency Preparedness, Assessment  
and Emergency Response  
Office of Ecosystems Protection and Remediation  
Region 8  
U.S. Environmental Protection Agency

DATE: 3/28/11

Ms. Kara Hellige  
March 1, 2012  
Page 2 of 2

**Attachment F**

U.S. EPA Memo, New Effective Date for Rico UAO CERCLA 08-2011-0005  
(Dated April 21, 2011)



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

Ref: 8ENF-L

April 21, 2011

Mr. Bill Duffy  
Counsel for Atlantic Richfield  
Davis Graham & Stubbs  
1550 Seventeenth Street, Suite 500  
Denver, CO 80202

Re: New Effective Date for Rico Unilateral Administrative Order CERCLA 08-2011-0005

Dear Mr. Duffy:

This letter is to confirm that, pursuant to Paragraph 66 of EPA Unilateral Administrative Order to Atlantic Richfield, the Effective Date of the Order is April 18, 2011. Please feel free to contact me with any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "Amelia Piggott", is written over a faint, larger signature.

Amelia Piggott  
Enforcement Attorney  
U.S. EPA Region 8  
303.312.6410

cc: Adam Cohen, Davis Graham & Stubbs  
Matt Cohn, EPA

